

REMARKS

At the time the Examiner mailed the present Final Official Action, claims 1-15 and 17-37 were pending, and the Examiner rejected all pending claims. By this paper, Applicant has canceled claims 1-9. Thus, claims 10-15 and 17-37 remain pending. Applicant respectfully submits that the present application is in condition of allowance in view of the amendments set forth above and the remarks set forth below.

Drawings

The Applicant recognizes that formal drawings will be required before the application is issued. The formal drawings are not presently submitted, but will be filed after the claims have been indicated as being allowable.

Claim Rejections under 35 U.S.C. § 112, First Paragraph

The Examiner rejected claim 1 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. As explained above, by this paper Applicant has canceled claim 1, thus making the Section 112 rejection moot. Therefore, the Applicant respectfully requests withdrawal of the rejection under the first paragraph of Section 112.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1-9 under 35 U.S.C. § 102(b) as being anticipated by Lee et al. (U.S. Patent No. 5,870,520, hereafter referred to as “the Lee reference”); the Examiner rejected claims 10-15 and 34-35 under 35 U.S.C. § 102(e) as being anticipated by

Nevis et al. (U.S. Patent No. 6,581,159, hereafter referred to as “the Nevis reference”); and claims 17-23 under 35 U.S.C. § 102(e) as being anticipated by Spiegel et al. (U.S. Patent No. 6,711,675, hereafter referred to as “the Spiegel reference”). As set forth in detail below, Applicant respectfully traverses the rejection of claims 10-15, 17-23 and 34-35.

Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims contain even one recitation not found in the cited reference, the reference does not anticipate the claimed subject matter.

Claim 1-9

As explained above, claims 1-9 have been canceled. Thus, the rejection of claims 1-9 is moot and the Applicant requests withdrawal of the rejection.

Claims 10-15

In rejecting independent claim 10, the Examiner stated, *inter alia*,

Nevis teaches ... a security device ... the security device being a switch (Nevis, column 5 lines 15-30, installs if hash values are correct, the act of installing occurs in response to a stimulus in the form of a correct hash comparison).

Office Action, pages 6-7. Independent claim 10 recites, *inter alia*, “A computer system comprising ... a security device ... wherein the security device comprises a switch.” The specification explains that the security switch may be, for example, a software switch or a hardware switch. Application, p. 9, lines 15-18.

The “hash values” relied upon by the Examiner cannot reasonably be considered to literally comprise the “switch” of claim 10. Specifically, in sharp contrast to the “switch” of claim 10, the Nevis reference discloses computing hash values and comparing the computed hash values with saved hash values. Nevis, col. 5 lines 10-30. If the comparison shows the hash values are equal, it simply means the module provided has been proven to be the same as that which existed at the time the firmware was created. Nevis, col. 5, lines 19-22. Such a result does not “unlock” the hardware, but rather only recognizes the external BIOS as a protected privileged firmware subprogram. Nevis, col. 5, lines 22-25. As such, the comparison of the hash values does not perform a “switch” function as suggested by the Examiner.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of claim 10, and thus the subject matter of dependent claims 11-15, is patentable over the teachings of the Nevis reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner’s rejection of claims 10-15.

Claims 34-35

In rejecting independent claim 34, the Examiner stated:

Nevis teaches all that is described above and further teaches the loading of the program over a network connection (Nevis, col. 3, lines 51-58, Internet), and if the network connection fails, re-establishing the network

connection and once the network connection is re-established, continuing to load the program into the memory over the re-established network connection (Nevis, column 3 lines 51-58, Internet).

Office Action, pages 7-8. Independent claim 34 recites a method of operating a computer system comprising,

“loading a program into a memory over a network connection; if the network connection fails, re-establishing the network connection; and once the network connection is re-established, continuing to load the program into the memory over the re-established network connection.”

Contrary to the Examiner’s assertion, the elements including: “if the network connection fails, re-establishing the network connections; and once the network connection is re-established, continuing to load the program into the memory over the re-established network connection,” are clearly not taught by the Nevis reference. While the Internet may re-establish connection and further makes use of protocols, such as TCP, to ensure that packets are delivered, the protocols have limitations. Specifically, it is believed that the TCP protocol is a connection based protocol, necessitating a connection to be maintained between the two devices that are communicating. When a connection is lost by a device downloading data, the sending device will stop sending data. If the connection is re-established, the program will not *continue* to load into memory, it will simply try to reload from the beginning. To be clear, in the TCP protocol, the program that was being downloaded prior to the loss of connection will not *continue* to download as is claimed in independent claim 34. Therefore, by simply mentioning the Internet, the Nevis reference fails to disclose the additional elements of independent claim 34.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of claim 34, and thus the subject matter of dependent claim 35, is not disclosed by the

Nevis reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 34 and 35.

Claims 17-23

In rejecting independent claim 17, the Examiner stated, "Spiegel teaches verifying a program of an appliance server (Spiegel, col. 4, lines 38-39) and if not verified, signaling a host computer to load a replacement program into the appliance server (Spiegel, col. 4, lines 40-43)." Independent claim 17 recites a method of operating a computer system comprising the acts of: "verifying a program of an appliance server; and if not verified, signaling a host computer to load a replacement program into the appliance server."

In sharp contrast, and contrary to the Examiner's assertions, the Spiegel reference does not disclose a "host computer" for performing any function, much less a host computer that may be signaled to load a replacement program into an appliance server. Indeed, the section of the Spiegel reference relied upon by the Examiner merely states that if the validation fails, a backup BIOS startup block located in the "reclaim block" may be verified. Spiegel, col. 4, lines 40-43. There is no indication that the reclaim block is a host computer. In fact, the Spiegel reference describes that the reclaim block is also referred to as an "update recovery block" and it appears to be merely another block of code partitioned in the firmware hub. See Spiegel, FIG. 2; col. 3, lines, 18 through col. 4, line 29. The Spiegel reference further discloses that a Flash Media Manager (FMM) is used to access blocks in the firmware hub. Spiegel, col. 3, line 18-52. Thus, even if this "block" equates to a replacement program loaded if a program does not pass verification, the Spiegel reference simply does not teach that a *host computer* may be signaled to load such a replacement program, as set forth in independent claim 17.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of independent claim 17, and thus the subject matter of dependent claims 18-23, is not disclosed by the Spiegel reference. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 17-23.

Rejections Under 35 U.S.C. § 103

In the Final Official Action claims 24-31 were rejected under 35 U.S.C. §103(a) as being anticipated over the Nevis reference in view of the Spiegel reference; and rejected claims 36-37 under 35 U.S.C. §103(a) as being unpatentable over the Nevis reference in view of Holtey (U.S. Patent No. 5,491,827, hereafter referred to as "the Holtey reference"). The Applicant respectfully traverses this rejection.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish *prima facie* obviousness of a claimed invention, *all* the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974) (emphasis added). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Additionally, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to

have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

Claims 24-31

In rejecting independent claim 24, the Examiner stated:

Nevis teaches everything described above, but fails to teach the reloading of the first program from the execution memory into the storage memory if the second program is not verified. Spiegel teaches the reloading of the first program from the execution memory into the storage memory if the second program is not verified (Spiegel, col. 4, lines 40-43, backup bios startup block). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Spiegel's method of responding to failed authentication with Spiegel's method of updating a BIOS because it offers the advantage of allowing reprogramming if tampering is detected (Spiegel, col. 1, lines 34-55).

Office Action, Page 9. Independent claim 24 recites:

A method of operating a computer system, the method comprising the acts of: during operation of a computer executing a first program in execution memory and having a copy of the first program stored in a storage memory, replacing the first program stored in the storage memory with a second program by loading the second program into the storage memory; verifying the second program stored in the storage memory; and if not verified, reloading the first program from the execution memory into the storage memory.

The Examiner admits, and the Applicant agrees, the Nevis reference fails to teach reloading the first program from the execution memory into the storage memory if the second program is not verified. However, contrary to the Examiner's assertion, Applicant asserts that the Spiegel reference also fails to disclose this subject matter and, thus, fails to cure the recognized deficiency of the Nevis reference.

As discussed earlier in regard to claims 17-23, the Spiegel reference discloses saving a backup copy of a BIOS program into a partitioned portion of the firmware hub prior to replacement of the BIOS program. See Spiegel, FIG. 2; col. 3, line 18- col. 4, line 25. In the

event power is lost prior to completing replacement of the BIOS or in the event that a replacement program is not verified, the backup copy may be used. Spiegel, col. 4, lines 17-25, and 38-43. The Spiegel reference simply does not disclose the reloading of a first program from the execution memory into the storage memory, as set forth in the first paragraph of independent claim 24. Therefore, the combination of the Nevis and Spiegel references fails to disclose all of the elements set forth in independent claim 24.

In view of the remarks set forth above, Applicant respectfully submits that the subject matter of independent claim 24, and thus the subject matter of dependent claims 25-31, patentably distinguishes over the teachings of the Nevis and Spiegel references. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claims 24-31.

Claim 36 and 37

The Examiner rejected claims 36 and 37 under 35 U.S.C. § 103 as being unpatentable over the Nevis reference in view of the Holtey reference. Applicant respectfully submits that the subject matter of claims 36 and 37 distinguishes over the teachings of the Nevis and Holtey references for the reasons set forth above in regard to the application of the Nevis reference to independent claim 34. The Nevis reference does not disclose the subject matter set forth in independent claim 34, and the Holtey reference does not cure these deficiencies. Accordingly, combination of the Nevis reference and the Holtey reference cannot render the subject matter set forth in dependent claims 36 and 37 obvious.

In view of the remarks set forth below, Applicant respectfully submits that the subject matter of claims 36 and 37 is patentably distinguishable over the Nevis and Holtey

references. Accordingly, Applicant respectfully requests withdrawal of the Examiner's rejection of claim 36 and 37

Conclusion

In view of the remarks and amendments set forth above, the Applicant respectfully request allowance of the pending claims. In the event that the Examiner is not persuaded by the above remarks and amendments the Applicant intends to submit a Pre-Appeal Brief Request for Review or alternatively file a Notice of Appeal pursuant to 35 U.S.C. 134. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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